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(71) Applicant: **PROPPER MANUFACTURING CO.,**  
**INC.**  
**Long Island City, New York 11101 (US)**

(72) Inventor: **Kinney, Dennis**  
**Forest Hills, New York 11375 (US)**

(74) Representative: **Portal, Gérard et al**  
**Cabinet Beau de Loménie**  
**158, rue de l'Université**  
**75340 Paris Cédex 07 (FR)**

(54) **Sterilization indicator using DNA specific dyes**

(57) A method of determining the effectiveness of a sterilization cycle in a sterilization chamber by the use of an indicator containing DNA and a dye which can be bound thereto. The indicator containing DNA is placed in the sterilization chamber prior to the beginning of the sterilization cycle. When the DNA is subjected to heat and steam, the molecule is fragmented so that it is no longer capable of binding the dye. The DNA is withdrawn from the indicator after the sterilization cycle, contacted by a solution of the dye and, thereafter, dipped

into wash water. If sufficient fragmentation has taken place, a substantial percentage of the dye will be washed off during the second dip. This is easily recognized by the operator and the efficacy of the cycle can be determined. On the other hand, if insufficient heat and steam has been applied, the remaining DNA will retain the dye and little or no change in color will be observed. In such a case, the operator will immediately recognize that the sterilization cycle was ineffective.



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# EUROPEAN SEARCH REPORT

Application Number  
EP 00 40 3123

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	PANASCI L ET AL: "THE EFFECT OF PROLONGED INCUBATIONS AND HEAT DENATURATION ON MELPHALAN-INDUCED DNA CROSS-LINKS AS MEASURED BY THE ETHIDIUM BROMIDE FLUORESCENCE ASSAY" CANCER LETTERS, vol. 50, no. 2, 1990, pages 129-132, XP008001462 ISSN: 0304-3835 * the whole document *	1-18	C12Q1/22 G01N31/22 G01N33/52 A61L2/26
A	US 5 770 393 A (DALMASSO JOSEPH P ET AL) 23 June 1998 (1998-06-23) * the whole document *	1-18	
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 14 March 2002	Examiner Gunster, M
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 40 3123

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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14-03-2002

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